

**REMARKS**

The Office Action mailed June 17, 2005 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

**Rejection(s) Under 35 U.S.C. § 102(b)**

Claims 1 – 3, 5, 7 – 8, 10 and 12 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. pat. no. 5,890,077 (Hanawa et al., hereinafter, “Hanawa”).

Claim 1 has been amended to read as follows:

1. A system comprising:  
a radio modem unit including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit;  
an RF signal booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, wherein the booster unit is connectable to the radio modem unit with a connector adapted to transmit RF signals through a connection line capable of carrying a DC offset; and  
auto-detect logic configured to respond to an interaction between the first and second DC offset circuits to thereby enable a determination of whether the booster unit is connected to the radio modem.

Hanawa fails to disclose all the limitations of Claim 1. The anticipation rejection based on Hanawa of Claim 1, and of Claims 2 – 3, 5, 7 – 8, 10 and 12 dependent therefrom, should therefore be withdrawn. It will be appreciated that, according to the M.P.E.P., a claim is

anticipated under 35 U.S.C. § 102 only if each and every claim element is found, either expressly or inherently described, in a single prior art reference.<sup>1</sup>

**Rejection(s) Under 35 U.S.C. § 103(a)**

Claims 4, 6 and 11 were rejected under 35 U.S.C. § 103(a) as unpatentable over Hanawa in view of U.S. pat. no. 5,457,814 (Myrskog et al., hereinafter, “Myrskog”).

Claims 4 and 6 depend from Claim 1, which recites, inter alia, a radio modem unit including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit; an RF signal booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits; and auto-detect logic configured to respond to an interaction between the first and second DC offset circuits to thereby enable a determination of whether the booster unit is connected to the radio modem. Hanawa fails to disclose or suggest all of these features.

Myrskog does not remedy this failure; therefore, even if properly combinable, the invention of Claims 1, 4 and 6 would not result or be rendered obvious by Hanawa nor Myrskog. As it will be recalled, the Manual of Patent Examining Procedure (M.P.E.P.) states that,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed

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<sup>1</sup> Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.<sup>2</sup>

Claim 11 depends from Claim 8, which recites, inter alia, a radio including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit; an RF signal connector operably connected to the radio; and a detector unit adapted to detect DC offset to determine whether the connector is connected to a booster unit based on an interaction between the first and DC offset circuit and a second DC offset circuit included in the booster unit and comprising the other of the pull-up or pull-down circuits. These features are similar to those of Claim 1, and the same reasoning applies. Therefore the invention of Claims 8 and 11 is patentable over the combination of Hanawa and Myrskog.

Claims 13 – 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Hanawa in view of U.S. pat. no. 6,230,031 (Barber).

Claim 17 has been amended to read as follows:

13. A system comprising:
  - a radio modem unit including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit; and
  - an RF signal booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, wherein the booster unit is connectable to the radio modem unit with a single coaxial connector adapted to transmit RF signals and a DC offset indicative of the presence of the booster unit based on an interaction between the first and second DC offset circuits, and wherein baseband signals are transmitted to the RF

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<sup>2</sup> M.P.E.P § 2143.

signal booster unit by way of the single coaxial connector by the radio modem and are used by the booster unit to prepare for transmission.

Hanawa fails to disclose or render obvious all the limitations of Claim 13, and Barber does not remedy this failure. Accordingly, the obviousness rejection based on Barber and Hanawa of Claims 13 and 14 – 17 dependent therefrom, even if these two references were properly combinable, is improper and should be withdrawn.

Claims 19 and 21 were rejected under 35 U.S.C. § 103(a) as unpatentable over Barber in view of Hanawa and further in view of U.S. pat. no. 4,371,749 (Lind).

Claim 19, from which Claim 21 depends, has been amended to read as follows:

19. An RF signal booster unit adapted to amplify RF signals from a radio modem including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit, the booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, and further including a switch that significantly attenuates the RF energy from the radio modem that is provided to a power amplifier in the booster unit by way of a connection line adapted to further carry a DC offset indicative, based on an interaction between the first and second DC offset circuits, of the presence of the booster unit until a valid power control message is received from the radio modem, the switch comprising a pair of diodes arranged back-to-back and disposed in the RF signal path, such that when the switch is in an ON position RF signals pass through the diodes from the radio modem to the booster unit, and when the switch is in an OFF position, RF signals are precluded by the diodes from effectively passing from the radio modem to the booster unit.

The combination of Barber, Hanawa and Lind, even if proper, fails to disclose or render obvious all the limitations of Claim 19, and for this reason at least Claim 19, and Claim 21 dependent thereon are patentable over these references.

Claims 22 and 24 – 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Hanawa in view of Barber.

Claim 22, from which Claims 24 – 25 depend, has been amended to read as follows:

22. Method of using a radio modem unit and an RF signal booster unit, the booster unit and radio modem unit connectable using a connector establishing a connection line, the method comprising:

in the radio modem unit, detecting a DC offset on the connection line to determine whether the booster unit is connected based on an interaction between a first DC offset circuit in the radio modem including one of a pull-up or a pull-down circuit and a second DC offset circuit in the booster unit including the other of the pull-up or pull-down circuits;

if the booster unit is connected, transmitting baseband signals on the connection line from the radio modem to the booster unit to allow the booster unit to prepare for transmission; and

thereafter, transmitting an RF signal on the connector from the radio modem to the booster unit.

The combination of Hanawa and Barber, even if proper, fails to disclose or render obvious all the limitations of Claim 22, and for this reason at least Claim 22, and Claims 24 – 25 dependent thereon are patentable over these references.

**Conclusion**

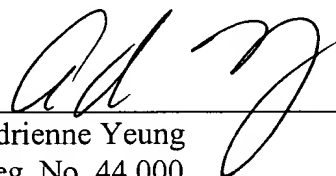
In view of the preceding discussion, Applicants respectfully urge that the claims of the present application define patentable subject matter and should be passed to allowance.

If the Examiner believes that a telephone call would help advance prosecution of the present invention, the Examiner is kindly invited to call the undersigned attorney at the number below.

Please charge any additional required fees, including those necessary to obtain extensions of time to render timely the filing of the instant Amendment and/or Reply to Office Action, or credit any overpayment not otherwise credited, to our deposit account no. 50-1698.

Respectfully submitted,  
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